



Antenatal psychological distress and postnatal depression: A prospective study from an urban clinic

K.A. Mariam, Krishnamachari Srinivasan *

Department of Psychiatry, St. John's Medical College Hospital & St. John's Research Institute, Bangalore 560034, India

ARTICLE INFO

Article history:

Received 24 November 2008
Received in revised form 12 March 2009
Accepted 9 April 2009

Keywords:

Antenatal depression
Postpartum depression

ABSTRACT

Postnatal depression is a significant public health problem in developing countries. In addition to traditional risk factors, studies from developing countries have identified some cultural factors related to the development of postnatal depression. The present prospective study conducted at a teaching general hospital in an urban setting sought to examine the prevalence and risk factors in the development of postpartum depression. 132 pregnant mothers attending antenatal clinic were assessed for psychological distress at third trimester on General Health Questionnaire-28. 27 women (20%) obtained a score of >8 on General Health Questionnaire-28. Mothers were interviewed again between 6 and 10 weeks after childbirth. Variables that were measured included postnatal depression, obstetric history and socio-demographic characteristics. 39 women (30%) scored greater than 12 on Edinburgh Postnatal Depression Scale at 6–10 weeks indicative of postpartum depression. 44% of women with antenatal psychological distress developed postpartum depression. A significantly greater proportion of women with postpartum depression were from lower socio-economic strata. The finding that antenatal psychological distress was a risk factor in the development of postpartum depression calls for routine screening of psychological distress during antenatal visits.

© 2009 Elsevier B.V. All rights reserved.

1. Introduction

Postnatal depression is generally seen around 6–8 weeks of childbirth. Various risk factors associated with postnatal depression includes past history of psychological disorder, psychological disorder during pregnancy, low socio-economic status, complicated delivery and poor marital relationship (O'Hara and Swain, 1996). In addition to traditional risk factors, studies from developing countries have identified gender based factors (Patel et al., 2002), and poverty (Patel et al., 2002; Rahman and Creed, 2007) as being important determinants of postpartum depression. Chandran et al. (2002) in a community-based study from rural India, reported that birth of a girl child when a son is desired as a risk factor for the onset of postpartum depression. A study from rural Pakistan noted that living in poverty, having five or more children, an uneducated husband and lacking in a confidant, but not gender of the child, were predictive of persistence of postnatal depression at 12 months (Rahman and Creed, 2007). Studies that have reported cultural factors such as birth of a female child (Chandran et al., 2002) or poverty (Rahman and Creed, 2007) as being risk factors for the development of postpartum depression

have been done predominantly in rural populations. In this prospective study, we sought to study the prevalence of postpartum depression in women attending an urban tertiary care hospital and identify some of the risk factors associated with postpartum depression.

2. Materials and methods

This study was a part of the prospective cohort study, focusing on maternal nutrition, antenatal psychological distress and their influence on birth outcomes at St John's Medical College Hospital, Bangalore, India. The Institutional Ethical Review Board at St John's Medical College Hospital approved all study procedures, and written informed consent was obtained from each study subject at enrollment.

2.1. Subjects

Pregnant women attending routine antenatal check up at the Obstetrics and Gynecology Out Patient Department of St John's Medical College Hospital and anticipating to deliver at St John's Hospital were invited to participate in the study. Women with multiple pregnancies, those with a clinical diagnosis of chronic illness such as diabetes mellitus, chronic hypertension or hyper/hypothyroidism or were on long term medications were excluded.

* Corresponding author. Tel.: +91 80 22065290; fax: +91 80 25502088.
E-mail address: srinivas@iphcr.res.in (K. Srinivasan).

Similarly, women infected with blood borne diseases; i.e. positive for hepatitis B surface antigen (HbSag), HIV or syphilis were also excluded from the study. In addition, women on any psychotropic medication and or having a psychotic illness were not included in the study. The routine antenatal care (folic acid, iron, calcium supplements, and tetanus toxoid) was provided to the study participants. Antenatal psychological distress in mothers was assessed on General Health Questionnaire-28 item version (GHQ-28) during the third trimester of pregnancy. GHQ-28 has been extensively used in India; and a standardized translated version of GHQ-28, available in local language, was used in the present study (Sriram et al., 1989). Consenting patients were interviewed around 6–8 weeks after delivery on the following measures:

1. Socio-economic status was measured according to the recently revised version of Kuppuswamy's socio-economic status scale (Mishra and Singh, 2003). The scale arrives at socio-economic class by examining educational status, occupation and income. Based on the total score obtained on the scale, subjects are classified as belonging to upper, upper middle, lower middle, upper lower and lower socio-economic class.
2. The Edinburgh Postnatal Depression Scale (EPDS), a widely used screening questionnaire to identify postnatal depression, was utilized (Cox, 1987). Kannada versions of the scale were developed by use of the translation-back-translation method from English. EPDS has 10 items and a score of 12 or above indicates the likelihood of depression during the postpartum period. EPDS has been used in previous studies in India (Patel et al., 2002) and other Asian cultures (Lee et al., 1998) and a cutoff score of 11 or 12 on EPDS was found to detect depression with a specificity of 85% and sensitivity of 92% (Patel et al., 2002).
3. Obstetric histories included parity, mode of delivery, gender of the infant and medical complications during pregnancy. Data was also obtained about the availability of social support during pregnancy and after delivery.

Subjects with postpartum depression identified on EPDS (score of 12 or above) were compared with those without across various socio-demographic and obstetric variables using independent *t*-test (continuous variables) or chi-square test (categorical variables). Data was analyzed using SPSS for windows version 13. The significance was set at $p < .05$.

3. Results

A total of 132 consecutive women attending the antenatal clinic consented to participate in the study. None of the women had multiple pregnancies or were suffering from any chronic medical conditions. A majority of the women were Hindus ($n = 108$, 82%), have had high school education ($n = 80$, 60%), belonged to the middle socio-economic class ($n = 76$, 58%) and came from urban backgrounds ($n = 114$, 86%). Most women were living in an extended ($n = 52$, 39%) or a joint family setting ($n = 33$, 25%) and were married for less than 4 years ($n = 105$, 80%). A majority were primigravid ($n = 101$, 77%). Only 22% ($n = 29$) of the women worked outside the home.

27 women (20%) scored above the cutoff score of 8 on GHQ 28 administered at third trimester of pregnancy indicative of significant psychological distress. There were no significant differences in socio-demographic characteristics between mothers with and without antenatal psychological distress except that those with significant psychological distress were from a joint family setting. Obstetric history including mode of delivery, medical complications during pregnancy and gender of the infant were not significant between the two groups. A minority of infants were delivered premature ($n = 3$, 2%).

Table 1
Risk factors and postpartum depression.

Variables	EPDS non-cases ($n = 93$)	EPDS cases ($n = 39$)	<i>p</i> -Value
Age	23.9 ± 3.6	24.2 ± 3.4	0.53
Religion			0.36 ^a
Hindu	76 (82%)	32 (82%)	
Christian	14 (15%)	5 (13%)	
Muslim	3 (3%)	2 (5%)	
Education			1.76 ^a
High school	46(49%)	15 (38%)	
Graduate	34(37%)	19 (49%)	
Post graduate	13(14%)	5 (13%)	
Occupation			0.44 ^a
House wife	74 (80%)	29 (74%)	
Working	19 (20%)	10 (26%)	
Socio-economic status			4.65 ^{**}
Upper class	68 (73%)	21 (54%)	
Lower class	25 (27%)	18 (46%)	
Residence			0.03 ^a
Urban	80 (86%)	34 (87%)	
Rural	13 (14%)	5 (13%)	
Type of family			1.11 ^a
Nuclear	35(38%)	12 (31%)	
Extended	37 (40%)	15 (38%)	
Joint	21 (22%)	12 (31%)	
Duration of marriage in years	2.7 ± 2.1	3.2 ± 2.4	0.96
Parity			0.69 ^a
Primipara	73(78%)	28(72%)	
Multipara	20 (22%)	11 (28%)	
Medical complications during pregnancy			0.13 ^a
Absent	84 (90%)	36(92%)	
Present	9 (10%)	3 (8%)	
Mode of delivery			0.24 ^a
Vaginal	66 (71%)	26 (67%)	
Caesarean	27 (29%)	13 (33%)	
Gender of the baby			0.13 ^a
Male	58 (62%)	23 (59%)	
Female	35 (38%)	16 (41%)	

^a Chi-square test.

^{**} $p < .05$.

Of the 132 women who were re-examined at 6–10 weeks (mean = 7.7, SD = 1.9), 39 (30%) obtained a score of >12 on EPDS indicative of postnatal depression. A higher proportion of mothers with postnatal depression had antenatal psychological distress (44%, chi square = 3.5, d.f. = 1, $p = .06$). A significantly greater proportion of mothers with postnatal depression were from low socio-economic strata (Table 1) Obstetric history that included parity, mode of delivery, medical complications during pregnancy and gender of the baby were not significantly different between the two groups.

4. Discussion

The present study prospectively examined some of the risk factors associated with the development of postnatal depression in mothers who regularly attended an antenatal clinic at a tertiary care centre. The key finding of the study that antenatal depression is a risk factor for postnatal depression is in agreement with earlier observations (Nhiwatiwa et al., 1998; Najman et al., 2000). 44% of the women with antenatal psychological distress developed postnatal depression. However, in the present study, the finding that the association between antenatal psychological distress and postnatal depression was not statistically significant could be related to the relatively small sample size. We replicated the

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات